

Advisory Circular

Subject: Instructions for Completion of **Date:** 1/25/07 **AC No:** 43.9-1F

FAA Form 337 Initiated by: AFS-350

1. PURPOSE. This advisory circular (AC) provides instructions for completing Federal Aviation Administration (FAA) Form 337, Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance).

- **2. CANCELLATION.** AC 43.9-1E, Instructions for Completion of FAA Form 337 (OMB No. 2120-0020), Major Repair and Alteration (Airframe, Powerplant, Propeller, or Appliance), dated 5/21/87, is canceled.
- **3. RELATED REGULATIONS.** Title 14 of the Code of Federal Regulations (14 CFR) part 43, §§ 43.5, 43.7, 43.9, and appendix B.
- **4. INFORMATION.** FAA Form 337 is free and available at all FAA Manufacturing Inspection District Offices, Flight Standards District Offices (FSDO), International Field Offices, Certificate Management Offices, and online at http://forms.faa.gov/forms/faa337.pdf.
 - **a.** The form serves two main purposes:
- (1) To provide aircraft owners and operators with a record of major repairs and major alterations indicating the details and approvals.
- (2) To provide the FAA with a copy of the form for inclusion in the aircraft records at the FAA Aircraft Registration Branch, AFS-750.
- **b.** This form can be completed on paper or by using the electronic FAA Form 337. Information can be found online at http://eformservice.faa.gov/eForm337.aspx or by contacting your local FSDO.

5. ELECTRONIC FORMAT.

a. Electronic Tracking Number. In the upper right corner of the form's header, there is a block titled "Electronic Tracking Number." This block is used only in the electronic version to automatically apply a number that identifies and retrieves forms electronically. Further information on the use of this number is supplied in training material at the Web site provided in paragraph 4b of this document.

AC 43.9-1F 1/25/07

b. Watermark. Under current policy, the header block titled "For FAA Use Only" has no official use except as a watermark applied automatically to indicate submittal when using electronic media.

- **6. FORM INSTRUCTIONS.** The person who performs or supervises a major repair or major alteration must prepare Form 337. The form is executed at least in duplicate and is used to record major repairs and major alterations made to an aircraft, airframe, powerplant, propeller, appliance, or a component part thereof. The following instructions apply to items 1 through 8 of the form as illustrated in Appendix 1. The terms "Item" and "Block" are used synonymously in FAA documents relating to data collection on Form 337.
- **a.** Item 1 Aircraft. The "Nationality and Registration Mark" is the same as shown on Aircraft Certification (AC) Form 8050-3, Certificate of Aircraft Registration. An "N" prefix denotes the nationality for U.S. registered aircraft. Information to complete the "Make," "Model," and "Serial Number" blocks is found on the aircraft manufacturer's identification plate. A "Series" block has been provided to further identify the series of a specific model. Proper segregation of the model and series will be useful in collecting data for safety related issues.
 - NOTE: When the aircraft registry receives a completed Form 337 for the official aircraft file, it is validated by matching the registration "N" number with the serial number. If an application for a change to the "N" number has been made, it is important for the submitter to receive verification of the change from the FAA registry with a new AC Form 8050-3. If the Form 337 must be submitted before receipt of the new registration then the old "N" number must be used.
- **b.** Item 2 Owner. Enter the aircraft owner's complete name and address as shown on AC Form 8050-3. When work is performed during a change in ownership, it is permissible to use the name and address shown on AC Form 8050-1, Aircraft Registration Application.
 - NOTE: When a major repair or major alteration is made to a component part, items 1, 2, and in some cases 5 will be left blank and the original and duplicate copies of the form will remain with the part until it is installed on an aircraft. After entering the required information in items 1, 2, and if appropriate, 5, the person who installed the part will give one form to the owner/operator and forward the duplicate copy to the FAA registry within 48 hours after the aircraft is approved for return to service. If a component part of an airframe, powerplant, propeller, or appliance is repaired or altered and the unit identification information is not known, it is appropriate to apply the preceding procedure and leave item 5 blank until the airframe, powerplant, propeller or appliance is installed on the aircraft.
- **c.** Item 3 For FAA Use Only. Indicate approval in item 3 when the FAA determines that data used to perform a major repair or major alteration conforms to accepted industry practices and is in compliance with current guidance and regulatory requirements. Approval is indicated by one of the following methods. (See paragraph 7, Administrative Processing, for further details.)

Page 2 Par 5

1/25/07 AC 43.9-1F

(1) **Approval of Data by Examination Only.** Enter the following statement on Form 337 when the data package is reviewed and a data approval is completed:

"The data identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in section 43.7."

(2) Approval of Data by Physical Inspection. Enter the following statement on Form 337 when a physical inspection, demonstration, or other type of test of an aircraft is satisfactorily performed and an installation approval is completed:

"Approval by Physical Inspection, Demonstration, Testing, etc.—One Aircraft: The alteration or repair identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in section 43.7." (Order 8300.10, vol. 2, ch. 1, section 2, paragraph 5d(3).)

(3) Designated Airworthiness Representative Statement of Completeness. Authorized designee certification of data indicates that the data in item 8, Description of Work Accomplished, comes from FAA-approved sources and addresses all the original certification requirements for the aircraft described in item 1. It does not constitute a field approval or approval of the data. Enter the following statement when an authorized designee has reviewed and certified the alteration data package by signing, dating, and entering its designee authorization number in item 3:

"The alteration identified herein has been reviewed and found to be complete with appropriate Designated Engineering Representative approvals. All aspects of the alteration(s) are compatible and eligible for use on the above described aircraft, subject to conformity inspection by a person authorized in § 43.7." (Order 8300.10, vol. 2, ch. 1, section 1, paragraph 15c.)

(4) Overweight Aircraft Operating Under a Special Flight Permit. Enter the following statement as part of the recordkeeping requirements for overweight flight permits contained in the current edition of FAA Order 8130.2, Airworthiness Certification of Aircraft and Related Products:

"No person may operate this aircraft, as altered herein, unless it has within it an appropriate and current special flight permit issued under part 21." (Order 8130.2F, paragraph 196b.)

- **d. Item 4 Type.** Enter a checkmark in the appropriate column to indicate whether the unit was repaired or altered. Use only one "Type" line per form.
- **e. Item 5 Unit Identification.** Use the information blocks under item 5 to identify the airframe, powerplant, propeller, or appliance that has been repaired or altered. It is only necessary to complete the blocks for the unit repaired or altered. The procedure for repair or

Par 6 Page 3

AC 43.9-1F 1/25/07

alteration of a component part when the unit identification is unknown is detailed in paragraph 6b above. Use only one "Unit Identification" line per form.

NOTE: A component of an airframe, powerplant, propeller, or appliance repaired or altered must be clearly identified in item 8 listing the part number, serial number, and any other descriptive information as applicable.

f. Item 6 – Conformity Statement.

- (1) "A" Agency's Name and Address. Enter the name of the certificated person or entity accomplishing the repair or alteration. Mechanics should enter their name and permanent mailing address. Manufacturers, repair stations, and certificated maintenance organizations should enter the name and address under which they are certificated.
- (2) "B" Kind of Agency. Check the appropriate box to indicate the type of person or organization that performed the work.

NOTE: For the purposes of this form, a Canadian Approved Maintenance Organization is considered a foreign mechanic.

- (3) "C" Certificate Number. Enter the appropriate certificate number for the "Kind of Agency" entered in item 6b of the form. Mechanics should enter their mechanic's certificate number. Certificated maintenance organizations and repair stations should enter the number referenced on the air carrier, air operator, or air agency certificate issued by the FAA as appropriate. Manufacturers should enter their Production Certificate or Supplemental Type Certificate number as appropriate. When repairing or altering articles, manufacturers holding Technical Standard Orders (TSO) approvals should enter the TSO number of the affected article.
- (4) "D" Conformity Statement. Use this space to certify that the repair or alteration complies with 14 CFR part 43. When work was performed or supervised by certificated mechanics, they should enter the completion date of the repair or alteration and sign their full name. Repair stations and maintenance organizations are permitted to authorize their employees to date and sign this conformity statement to comply with their FAA-approved program.
- (5) Fuel Tank Modification. For modifications involving installation of extended range fuel tanks in the passenger or baggage compartment as described in part 43, appendix B, check the box provided to indicate the modification.

NOTE: In this instance, one copy of Form 337 must be placed onboard the aircraft as specified in 14 CFR part 91, § 91.417 when the aircraft is returned to service.

g. Item 7 – Approval for Return to Service. Part 43 establishes the conditions under which major repairs or major alterations to airframes, powerplants, propellers, and appliances may be approved for return to service. This portion of the form is used to indicate approval or rejection of the repair or alteration and to identify the person or agency making the airworthiness determination.

Page 4 Par 6

1/25/07 AC 43.9-1F

(1) Check the "approved" or "rejected" box to indicate the finding. Rejected forms will be returned to the person who made the modification, as identified in item 6, for correction. Approved forms will be completed, signed, and submitted to the aircraft registry.

- (2) Check the appropriate box to indicate who made the finding. Use the box labeled "other" to indicate a finding by a person other than those listed. This box is reserved for any entity, not otherwise identified, that the FAA may authorize to perform that function. The person who made the finding should sign and date the form. The person's name should also be typed or printed below their signature and the appropriate certificate or designation number should be entered. If an aviation safety inspector (ASI) signs item 7, the ASI's office identifier is placed in the certificate or designation number block.
- (3) Before approving Form 337, it is the responsibility of the person returning the product to service to ensure that all the work described in item 8 matches approved data and that the information presented on the form is complete.
- (4) If the form is not accepted by the aircraft registry for any reason, it will be routed through the FAA regional office back to the return to service agent identified in item 7.

h. Item 8 – Description of Work Accomplished.

- (1) Enter a clear, concise, and legible statement describing the work accomplished in item 8 on the reverse side of Form 337. It is important to describe the location of the repair or alteration relative to the aircraft or component. If making a repair to a buckled spar, the description entered in item 8 might begin by stating, "Removed wing from aircraft and removed skin from outer 6 feet. Repaired buckled spar 49 inches from the tip in accordance with..." and continue with a description of the repair. If the repair or alteration can be concealed by skin or another structure then an authorized individual should make a pre-closure certification statement. This statement includes a signature and certificate number and says that a pre-closure inspection was made and that covered areas were found satisfactory.
- (2) The description should refer to all applicable 14 CFR sections and to the FAA-approved data used to substantiate the airworthiness of the repair or alteration. Forms of FAA-approved data are contained in Order 8300.10 and AC 43-210, Standardized Procedures for Requesting Field Approval of Data, Major Alterations, and Repairs.
 - NOTE: Supplemental data such as stress analyses, test reports, sketches, or photographs are often proprietary and not intended as part of the item 8 description. Supplemental data submitted as part of the item 8 description should be identified as an attachment to the form using the following procedure.
- (3) If additional space is needed to describe the repair or alteration for item 8, check the "Additional Sheets Are Attached" box at the bottom of the page. Attach sheets showing the aircraft nationality, registration mark, and the date the work was completed. All attachments to item 8 must be submitted on 8 ½- by 11-inch paper to allow for proper processing into the aircraft historical record at the aircraft registry. If attachments to Form 337 are received by the

Par 6 Page 5

AC 43.9-1F 1/25/07

FAA in a format larger than an 8 ½- by 11-inch page then the submission will be returned to the person identified in item 7 for correction and resubmission.

- (4) Showing weight and balance computations under item 8 is not required but it may be done. If weight and balance of the aircraft are affected by the work described on Form 337, the changes should be entered in the aircraft weight and balance records with the date, signature, and reference to the form.
- **7. ADMINISTRATIVE PROCESSING.** Form 337 will be executed in duplicate with one signed copy given to the aircraft owner and one copy forwarded to the FAA within 48 hours after the airframe, aircraft engine, propeller, or appliance is installed on an aircraft and approved for return to service. FAA processing of the forms and their supporting data will depend on whether approved or unapproved data is used.
- **a. Approved Data.** Complete the form as instructed in this AC, excluding item 3, and ensure that items 6 and 7 have been properly executed. Give a copy of the form to the aircraft owner/operator and send a duplicate copy to the FAA Aircraft Registration Branch within 48 hours after the airframe, aircraft engine, propeller, or appliance is installed on an aircraft and approved for return to service.
- **b.** Unapproved Data. Complete the form as instructed in this AC, leaving items 6 and 7 blank. Both copies of the form and any supplemental data will be sent to the local FAA district office. When the FAA determines that the major repair or major alteration data complies with regulations and conforms to accepted industry practices, data approval will be recorded by entering an appropriate statement in item 3. Both forms and any supplemental data will be returned to the applicant who will then complete items 6 and 7. The applicant will give one of the completed forms to the aircraft owner/operator and submit the other completed form to the FAA Aircraft Registration Branch for inclusion in the aircraft records.

NOTE: The electronic FAA Form 337 allows for electronic approvals and processing of Form 337 from the time it is used to describe the alteration or repair until it is forwarded to the FAA Aircraft Registration Branch. At this time the FAA does not allow for the mixing of the two processes. If Form 337 is started in the electronic format, it must be completed that way and cannot be completed using the paper process. Further information is supplied at the Web site shown in paragraph 4(b).

c. Signatures of Form 337.

(1) An FAA inspector's signature in item 3 indicates approval of the data described in that section for use in accomplishing the work described in item 8 of the form. The statement of completeness in item 3 by an appropriately rated designee is a "certification of completeness" of required data. It is not a field approval or approval of data.

NOTE: Signatures in item 3 count as data approval or completeness of approved data only and do not indicate the approval for return to service for the work in item 8.

Page 6 Par 6

1/25/07 AC 43.9-1F

(2) A signature in item 6 is a certification by the person performing the work that the work complies with all applicable airworthiness requirements and FAA-approved data. The certification is only applicable to the work described in item 8 or attached sheets.

- (3) A signature in item 7 by an FAA Flight Standards Inspector or Designee constitutes an authorized return to service. A signature is not an approval of data. Data approval procedures are performed in item 3 by an authorized individual and further defined in Order 8300.10 and AC 43-210. Other persons listed in item 7 are authorized to "approve for return to service" if the major repair or major alteration uses and conforms to FAA-approved data and is performed in compliance with part 43.
- (4) If engineering assistance was requested, written Aircraft Certification Office concurrence (e.g., memo or e-mail) becomes an attachment to Form 337.
- **d.** U.S. Military and Foreign Use. Form 337 is not authorized for use with aircraft not registered in the United States. The form may be provided to the U.S. Military or a foreign civil air authority if it is requested as a record of work performed and should be completed following part 43 and this AC. A note on the form should inform the U.S. Military or foreign authority that the form is not an official record and that the FAA aircraft registry will not record it.
- **e. Completed Forms.** Completed forms should be submitted to the Aircraft Registration Branch, AFS-750, PO Box 25504, Oklahoma City, Oklahoma 73125. Electronic forms are submitted automatically through the website at: http://eformservice.faa.gov/eForm337.aspx.

ORIGINAL SIGNED by Roger Forshee

James J. Ballough Director, Flight Standards Service

Par 7 Page 7

APPENDIX 1. FAA FORM 337

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pi Fi	of Transpotation (Air Federal Aviation Administration					irframe, Powerplant, Propeller, or Appliance)										
INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for e such violation. (49 U.S.C. §46301(a))													bsequent revision thereof) for each			
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		FAA Designee				Repair Station			Inspection Author		rization	Othe	Other (Specify)			
	Certificate or Resignation No.						Signature/Date of Authorized Individual									

FAA Form 337 (10-08)

APPENDIX 1. FAA FORM 337 (Continued)

	OTICE	
Weight and balance or operating limitation changes shall be e compatible with all previous alterations to assure continued co	intered in the appropriate aircraft record. An onformity with the applicable airworthiness r	i alteration must be requirements.
8. Description of Work Accomplished (If more space is required, attach additional sheets, identify with aircre	raft nationality and registration mark and date wor	rk completed.)
	Nationality and Registration Mark	Date

Additional Sheets Are Attached

FAA Form 337 (10-08)